CLAIMS

- 1. A sphere-shaped coated magnesium oxide powder having a surface coated with a double oxide and having an average shape factor of 1.25 or less.
 - 2. The sphere-shaped coated magnesium oxide powder according to claim 1, wherein said double oxide has a melting point of 2,773 K or lower.

10

3. The sphere-shaped coated magnesium oxide powder according to claim 2, wherein said double oxide comprises at least one element selected from the group consisting of aluminum, iron, silicon, and titanium, and magnesium.

15

- 4. The sphere-shaped coated magnesium oxide powder according to any one of claims 1 to 3, which contains said double oxide in an amount of 5 to 50 mass%.
- 5. The sphere-shaped coated magnesium oxide powder according to any one of claims 1 to 4, which has an average particle size of 5×10^{-6} to 500×10^{-6} m and a BET specific surface area of 5×10^{3} m²/kg or less.
- 25 6. A method for producing a sphere-shaped coated magnesium oxide powder, comprising allowing a compound of an element forming a double oxide to be present on the surface of magnesium oxide powder, and then fusing the resultant magnesium oxide powder at a high temperature so that the surface of the magnesium oxide powder is coated
- 30 that the surface of the magnesium oxide powder is coated with the double oxide and the magnesium oxide powder is shaped into sphere.
- 7. The method according to claim 6, wherein the compound of the element forming a double oxide together with magnesium is at least one compound selected from the group

consisting of an aluminum compound, an iron compound, a silicon compound, and a titanium compound.

- 8. The method according to claim 6 or 7, wherein the magnesium oxide powder to be coated has a crystallite size of 50×10^{-9} m or more.
 - 9. The method according to any one of claims 6 to 8, wherein the flame temperature is 2,073 K or higher.
- 10. A resin composition comprising the sphere-shaped coated magnesium oxide powder according to any one of claims 1 to 5.

10

20

- 15 11. The resin composition according to claim 10, wherein the resin in the resin composition is an epoxy resin.
 - 12. The resin composition according to claim 10, wherein the resin in the resin composition is a silicone rubber.
 - 13. An electronic device using the resin composition according to any one of claims 10 to 12.